1		TITLE 35: ENVIRONMENTAL PROTECTION
2		SUBTITLE F: PUBLIC WATER SUPPLIES
3		CHAPTER I: POLLUTION CONTROL BOARD
4		DADT (01
5		PART 601
6		INTRODUCTION
7	a	
8	Section	
9		eneral Requirements
0		pplicability and Organization of this Chapter
1		everability
2		nalytical Testing
13		efinitions
4	601.115 In	corporation by Reference
5   6	601 APPENDIX	A References to Former Rules (Repealed)
7	001.71112.102.11	references to Former Rules (Repetited)
8	AUTHORITY: 1	implementing Section 17 and authorized by Section 27 of the Environmental
9		15 ILCS 5/17 and 27].
20	Trotection / tet [+	13 IDC5 3/17 and 27].
21	SOURCE: Filed	with Secretary of State January 1, 1978; amended at 2 Ill. Reg. 36, p. 72,
22		29, 1978; amended at 3 Ill. Reg. 13, p. 236, effective March 30, 1979; amended
23	•	Ill. Reg. 11497, effective September 14, 1982; amended at 6 Ill. Reg. 14344,
24		per 3, 1982; amended in R84-12 at 14 III. Reg. 1379, effective January 8, 1990;
25		5 at 16 Ill. Reg. 1585, effective January 10, 1992; amended in R96-18 at 21 Ill.
26		ive May 8, 1997; amended in R15-22 at 40 Ill. Reg. 6784, effective April 15,
27		n R18-17 at 43 Ill. Reg. 8016, effective July 26, 2019; amended in R18-26 at 47
28		effective
29	s,	
30	<b>Section 601.101</b>	<b>General Requirements</b>
31		•
32	a) O	wners and official custodians of a public water supply in the State of Illinois
33		ust provide, under the Act, Board Rules, and the Safe Drinking Water Act (42
34		S.C. USC 300f et seq.), continuous operation and maintenance of public water
35		pply facilities to assure that the water is safe in quality, clean, adequate in
36		lantity, and of satisfactory mineral characteristics for ordinary domestic
37	<u> </u>	nsumption.
38		
39	b) Fi	nished Water Quality
10	•	-
11	1)	The finished water delivered to any user at any point in the distribution
12	,	system must contain no impurity at a concentration that may be hazardous
13		to the health of the consumer or that would be excessively corrosive or
		•

otherwise deleterious to the water supply. Drinking water delivered to any user at any point in the distribution system must contain no impurity that could reasonably be expected to cause offense to the sense of sight, taste, or smell.

- 2) Any No substance used in treatment <u>must not should</u> remain in the water at a concentration greater than that required by good practice. A substance that may have a deleterious physiological effect, or one for which physiological effects are not known, must not be used in a manner that would permit it to reach the consumer.
- 3) Concentrations of constituents listed in the following chart should not be exceeded in the finished water-

Contaminant	Secondary MCL	Noticeable Effects above the Secondary MCL
Aluminum	0.2 mg/L	colored water
Chloride	250 mg/L	salty taste
Color	15 color units	visible tint
Copper	1 mg/L	metallic taste; blue-green staining
Fluoride	2.0 mg/L	tooth discoloration
Foaming Agents	0.5 mg/L	frothy, cloudy; bitter taste; odor
Iron	0.3 mg/L	rusty color; sediment; metallic taste; reddish or orange staining
Manganese	0.05 mg/L	black to brown color; black staining; bitter metallic taste
Odor	3 T.O.N. (Threshold Odor Number)	"rotten-egg", musty or chemical smell
Silver	0.1 mg/L	skin discoloration; graying of the white part of the eye

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salty taste

hardness; deposits;

colored water; staining; salty Solids taste (Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_) 58 59 60 Section 601.102 Applicability and Organization of this Chapter 61 62 a) This Chapter applies The provisions of this Chapter shall apply to groundwater 63 and public water supplies, except for those designated as non-community water supplies. A public water supply ends<del>shall be considered to end</del> at each service 64 connection. 65 66 The rules in this Chapter Board regulations adopted in this Chapter are organized 67 b) as follows:provided in this Section. 68 69 70 1) Part 601 contains definitions, analytical testing requirements, and 71 incorporations by reference applicable to Parts 601, 602, 603, and 604607. 72 73 2) Part 602 contains permitting requirements and standards for community 74 water supplies and technical, financial, and managerial capacity 75 requirements for new community water supplies. 76 77 3) Part 603 contains ownership and responsible personnel requirements for 78 community water supplies. 79 80 4) Part 604 contains design, operation, and maintenance criteria for 81 community water supplies. Part 607 contains requirements for emergency 82 operation and cross-connection control. 83 84 5) Part 611 contains rules<del>regulations</del> identical in substance to<del>with</del> federal 85 regulations promulgated by the United States Environmental Protection 86 Agency (USEPA) under sections pursuant to Sections 1412(b), 1414(c), 1417(a), and 1445(a) of the Safe Drinking Water Act (SDWA) (42 87 88 U.S.C.<del>USC</del> 300g-1(b), 300g-3(c), 300g-6(a), and 300j-4(a)). Part 611 89 establishes primary drinking water rules regulations and includes 90 definitions and incorporations by reference applicable to Part 611. 91 92 6) Part 615 contains requirements and standards for the protection of 93 groundwater for certain types of existing facilities or units located wholly 94 or partially within a setback zone or a regulated recharge area. Part 615

250 mg/L

500 mg/L

Sulfate

Total Dissolved

95		includes definitions and incorporations by reference applicable to Part	
96		615.	
97			
98	7)	Part 616 contains requirements and standards for the protection of	
99		groundwater for certain types of new facilities or units located wholly or	
00		partially within a setback zone or a regulated recharge area. Part 616	
01		includes definitions applicable to Part 616.	
02			
03	8)	Part 617 contains the requirements and standards for regulated recharge	
04		areas. Part 617 includes definitions and an incorporation by reference	
05		applicable to Part 617.	
06			
07	9)	Part 618 contains requirements and standards for maximum setback zones	
80		Part 618 includes definitions applicable to Part 618.	
09			
10	10)	Part 620 contains the method of classification of groundwater,	
11		nondegradation provisions, the groundwater quality standards, and	
12		procedures and protocols for the management and protection of	
13		groundwater. Part 620 includes definitions and incorporations by	
14		reference applicable to Part 620.	
15			
16	(Source: Ar	mended at 47 Ill. Reg, effective)	
17			
18	Section 601.103 Se	everability	
19			
20	If any provision of t	this Chapter or itsthese rules or regulations is adjudged invalid, or if the	
21	application thereof	to any person or in any circumstance is adjudged invalid, that adjudication	
22	will such invalidity shall not affect the validity of this Chapter as a whole, or any portion other		
23	part, sub-part, sente	nce or clause thereof not adjudged invalid.	
24			
25	(Source: Ar	mended at 47 Ill. Reg, effective)	
26			
27	<b>Section 601.104 A</b>	nalytical Testing	
28			
29	a) To d	etermine compliance with the community water supplies rules in this Subtitle	
30	<u>F</u> and	regulations (35 Ill. Adm. Code.Subtitle F), all sampling, monitoring, and	
31	testir	ng <u>mustshall</u> be made according to the methods described in 35 Ill. Adm.	
32	Code	e 611, the National Primary Drinking Water Regulations (40 CFR 141), orang	
133	any o	other method specifically approved by the Agency.	
134			
35	b) All a	nalyses for substances other than those listed in 35 III. Adm. Code 611 must	
36	be pe	erformed by methods acceptable to the Agency.	
137			

138	(Source	ce: Amended at 47 Ill. Reg, effective)
139	G	
140	Section 601.1	105 Definitions
141	,	
142	a)	For purposes of 35 Ill. Adm. Code 601, 602, 603, and 604, unless a different
143		meaning of a word or term is clear from the context:
144		"A at!" magaz the Environmental Protection A at [415 II CC 5]
145		"Act" means the Environmental Protection Act [415 ILCS 5].
146 147		"Agency" means the Illinois Environmental Protection Agency.
148		Agency means the minors Environmental Protection Agency.
149		"Air Gap" means the unobstructed vertical distance through the free atmosphere
150		between the water discharge point and the flood level rim of the receptacle.
151		between the water discharge point and the nood level init of the receptacie.
152		"Atmospheric Vacuum Breaker" means a device designed to admit atmospheric
153		pressure into a piping system whenever a vacuum is caused on the upstream side
154		of the receptacle.
155		
156		"Aquifer Property Data" means the porosity, hydraulic conductivity, transmissivity,
157		and storage coefficient of an aquifer, head, and hydraulic gradient.
158		
159		"Board" means the Illinois Pollution Control Board.
160		
161		"Boil Order" means a notice to boil all drinking and culinary water for at least
162		five minutes before use, issued by the proper authorities to the consumers of a
163		public water supply affected, whenever the water being supplied may have
164		become microbiologically contaminated.
165		
166		"Certified Laboratory" means any laboratory certified under Section 4(o) of the
167		Act, or certified by USEPA for the specific parameters to be examined.
168		
169		"Chlorine"
170		
171		"Chlorine Demand" means the difference between the amount of chlorine
172		applied to a given water and the amount of total available chlorine
173		remaining at the end of the contact period. All test conditions (contact
174		time, pH <sub>2</sub> and temperature) must be given, expressing the chlorine demand
175		in a given water.
176		
177		"Combined Chlorine" means the reaction product formed when chlorine
178		has reacted with ammonia to form chloramines.
179		

180 "Free Chlorine" means the residual chlorine existing in water as the sum 181 of hypochlorous acid and hypochlorite ion. 182 "Total Chlorine" means the sum of the free chlorine and the combined 183 184 chlorine. 185 186 "Community Water Supply" or "CWS" means a public water supply which serves 187 or is intended to serve at least 15 service connections used by residents or 188 regularly serves at least 25 residents. [415 ILCS 5/3.145](Section 3.145 of the 189 Act) 190 191 "Confined Geologic Formations" are geologic water-bearing water bearing 192 formations protected against the entrance of contamination by other geologic 193 formations. 194 195 "Conventional Filtration Treatment" means a series of processes, including 196 coagulation, flocculation, sedimentation, and filtration resulting in substantial 197 particulate removal. 198 199 "Cross-connection" means any physical connection or arrangement between two 200 otherwise separate piping systems where flow from one system to the other is 201 possible. 202 203 "CT" or "CT<sub>calc</sub>" is the product of "residual disinfectant concentration" (RDC or 204 C) in mg/L determined before or at the first customer, and the corresponding "disinfectant contact time" (T) in minutes. If a supplier applies disinfectants at 205 206 more than one point prior to the first customer, it must determine the CT of each 207 disinfectant sequence before or at the first customer to determine the total percent 208 inactivation or "total inactivation ratio". In determining the total inactivation 209 ratio, the supplier must determine the RDC of each disinfection sequence and 210 corresponding contact time before any subsequent disinfection application points. 211 212 "Disinfectant" means any agent, including chlorine, chlorine dioxide, 213 chloramines, and ozone, added to water in any part of the treatment or distribution 214 process, that is intended to kill or inactivate pathogenic microorganisms. 215 216 "DPD Method" means an analytical method for determining chlorine residual 217 utilizing the reagent DPD (n-diethyl-p-phenylenediaminephenylenediamine). 218 219 "Effective External Linkage" is the ability of a water system to communicate and 220 exchange information with water customers, regulators, technical and financial 221 assistance organizations, and other entities that routinely interact with the water 222 system.

"Groundwater" means underground water which occurs within the saturated zone and geologic materials where the fluid pressure in the pore space is equal to or greater than atmospheric pressure. [415 ILCS 5/3.210](Section 3.210 of the Act)

"Head" means the sum of the elevation head, pressure head, and velocity head at a given point in an aquifer.

"Hydraulic Conductivity" means the rate of flow in gallons per day (gpd) through a cross section of one square foot (ft²) under a unit hydraulic gradient (gpd/ft²).

"Hydraulic Gradient" means the rate of change of total head per unit distance of flow in a given direction.

"Infrastructure" means all mains, pipes, and structures through which water is obtained and distributed to the public, including wells and well structures, intakes and cribs, pumping stations, treatment plants, reservoirs, storage tanks, and appurtenances, collectively or severally, actually used or intended to be used to furnishfor the purpose of furnishing water for drinking or general domestic use.

"Interconnection" means a physical connection between two or more community water supply systems.

"Maximum Average Daily Demand" or "Maximum Demand" means <u>the</u> highest average daily production over seven consecutive days.

"New Community Water Supply" means, beginning after October 1, 1999, all new community water supplies and those water supplies that expand their infrastructure to serve or intend to serve at least 15 service connections used by residents or regularly serveserves at least 25 residents. Any water supply that is not currently a community water supply butthat adds residents so that the total served is 25 residents or more without constructing additional infrastructure will become a community water supply, but will not be required to demonstrate capacity under 35 Ill. Adm. Code 602.103 unless the community water supply is on restricted status as required by 35 Ill. Adm. Code 602.106.

"Non-community Water Supply" means a public water supply that is not a community water supply. [415 ILCS 5/3.145](Section 3.145 of the Act)

"Official Custodian" means an individual who is an officer of an entity that is the owner of a community water supply and acts as the owner's agent in matters concerning the community water supply. [415 ILCS 45/9.4]

"Porosity" means the percentage of the bulk volume of a rock or soil that is occupied by interstices, whether isolated or connected, as defined by the ratio of the pore volume to the total volume of a representative sample of the medium.

"Public Water Supply" means all mains, pipes, and structures through which water is obtained and distributed to the public, including wells and well structures, intakes and cribs, pumping stations, treatment plants, reservoirs, storage tanks, and appurtenances, collectively or severally, actually used or intended for use for the purpose of furnishing water for drinking or general domestic use and which serve at least 15 service connections or which regularly serve at least 25 persons at least 60 days per year. [415 ILCS 5/3.365](Section 3.365 of the Act)

"Responsible Operator in Charge" *means an individual who is designated as a Responsible Operator in Charge of a community water supply* under Section 1 of the Public Water Supply Operations Act [415 ILCS 45/1] and 35 Ill. Adm. Code 603. [415 ILCS 45/9.6]

"Satellite Supply" means any community water supply that:

purchases all finished water from another community water supply;

does not provide any treatment other than chlorination or corrosion control; and

distributes finished water to the consumers.

"Sell Water" means to deliver or provide potable water, obtained from a public water supply subject to <u>this Chapterthese regulations</u>, to the consumer, who is then individually or specifically billed for water service, or where any monetary assessment is levied or required and specifically used for water service. Water supply facilities owned or operated by political subdivisions, homeowners' associations, and not-for-profit associations, as well as privately owned utilities regulated by the Illinois Commerce Commission, are considered to sell water whether or not a charge is specifically made for water.

"SEP" means special exception permit.

"Service Connection" is the opening, including all fittings and appurtenances, at the water main through which water is supplied to the user through a water service line.

308	"Storage Coefficient" means the volume of water an aquifer releases from or takes
309	into storage per unit surface area of the aquifer per unit change in head.
310	
311	"Surface Water" means all tributary streams and drainage basins, including
312	natural lakes and artificial reservoirs, which may affect a specific water supply
313	above the point of water supply intake.
314	
315	"Surface Water Supply Source" means any surface water used as a water source
316	for a public water supply.
317	
318	"Supply" means a community water supply.
319	
320	"Transmissivity" means the rate in gallons per minute (gpm), at which water is
321	transmitted horizontally through a unit width by the total saturated thickness of an
322	aquifer, in feet (ft), under a unit hydraulic gradient (gpm/ft).
323	
324	"Water Main" means any pipe with for the purpose of distributing potable water
325	that serves or is accessible to more than one property, dwelling, or rental unit and
326	is exterior to buildings.
327	
328	"Water Service Line" means any pipe from the water main or source of potable
329	water supply that serves or is accessible to not more than one property, dwelling, or
330	rental unit of the user.
331	
332	"Well Hydraulics" means equations that are applied to understand the effect that a
333	pumping well structure has on inducing the movement of water through permeable
334	rock formations and certain aquifer properties to determine the rate of withdrawal
335	of the well. This term is inclusive of equations that quantify wellbore skin
336	effects/well loss.
337	
338	"Wellhead Protection Area" or "WHPA" means the surface and subsurface recharge
339	area surrounding a community water supply well or well field, delineated outside of
340	any applicable setback zones (under Section 17.1 of the Act) established under
341	Illinois' Wellhead Protection Program, through which contaminants are reasonably
342	likely to move toward the well or well field.
343	
344	"Wellhead Protection Measures" means management practices needed to mitigate
345	existing and future threats to the water quality within the delineated WHPA.
346	chisming and rature anome to the water quanty within the defined with M.
347	"Wellhead Protection Program" means the Wellhead Protection Program for the
348	State of Illinois, approved by USEPA under section 1428 of the SDWA (42
349	U.S.C. USC 300h-7).
350	<u></u> 000 30011 1).

351 352	b)	Terms not specifically defined in subsection (a), will have the meanings ascribed in 35 Ill. Adm. Code 611.		
353				
354	c)	Terms not specifically defined in subsection (a) or (b) will have the meanings		
355	,	specified in The Water Dictionary, incorporated by reference in Section 601.115		
356		, , , , , , , , , , , , , , , , , , ,		
357	(Sour	ce: Amended at 47 Ill. Reg, effective)		
358	`	<i>C</i>		
359	Section 601.1	115 Incorporations by Reference		
360		•		
361	a)	Abbreviations and Short-name Listing of References. The following names and		
362	,	abbreviated names are used in this Chapter-I to refer to materials incorporated by		
363		reference:		
364				
365		"ANSI" means those standards published by American National Standards		
366		Institute.		
367				
368		"ASME" means the American Society of Mechanical Engineers.		
369				
370		"ASTM" means those standards published by ASTM International (formerly the		
371		American Society for Testing and Materials).		
372				
373		"AWWA" means those standards published by the American Water Works		
374		Association.		
375				
376		"NSF" means those standards published by NSF International (formerly the		
377		National Sanitation Foundation)the National Science Foundation International.		
378				
379		"Recommended Standards" means "Recommended Standards for Water Works -		
380		Policies for the Review and Approval of Plans and Specifications for Public		
381		Water Supplies".		
382		11		
383	b)	The <b>Board</b> Agency incorporates the following materials by reference:		
384	,			
385		ASME. American Society of Mechanical Engineers, Two Park Avenue,		
386		New York NY 10016, (800)843-2763, www.asme.org.		
387				
388		ASME BPVC-VIII-1-2015, Boiler & Pressure Vessel Code		
389		(BPVC), Section VIII – Rules for Construction of Pressure		
390		Vessels, Division 1: Rules for Construction and Pressure Vessels,		
391		2015.		
392				

ASTM. American Society for Testing and Materials, 100 Barr Harbor Drive, PO Box C700, West Conshohocken PA 19428-2959, (610)832-9500.  ASTM C 76-16, Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe, approved November 1, 2016.  ASTM C 361-16, Standard Specification for Reinforced Concrete Low-Head Pressure Pipe, approved September 1, 2016.  ASTM C 361-16, Standard Specification for Reinforced Concrete Low-Head Pressure Pipe, approved September 1, 2016.  ASTM C 443-12, Standard Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets, approved September 1, 2012.  ASTM D 1784-11, Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (PVC) Compounds, approved May 1, 2011.  ASTM D 1785-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120, approved August 1, 2015.  ASTM D 2241-09, Standard Specification for Poly(Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series), approved December 1, 2009.  ASTM D 2464-15, Standard Specification for Threaded Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  ASTM D 2466-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, approved March 1, 2015.  ASTM D 2467-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  ASTM D 2467-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.				
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ASTM C 76-16, Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe, approved November 1, 2016.  ASTM C 361-16, Standard Specification for Reinforced Concrete Low-Head Pressure Pipe, approved September 1, 2016.  ASTM C 443-12, Standard Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets, approved September 1, 2012.  ASTM D 1784-11, Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (PVC) Compounds, approved May 1, 2011.  ASTM D 1785-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120, approved August 1, 2015.  ASTM D 2241-09, Standard Specification for Poly(Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series), approved December 1, 2009.  ASTM D 2464-15, Standard Specification for Threaded Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  ASTM D 2466-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  ASTM D 2467-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  ASTM D 2467-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  ASTM D 2467-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  ASTM D 2564-12, Standard Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.	394	· · · · · · · · · · · · · · · · · · ·		
ASTM C 76-16, Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe, approved November 1, 2016.  400  401  ASTM C 361-16, Standard Specification for Reinforced Concrete Low-Head Pressure Pipe, approved September 1, 2016.  402  Low-Head Pressure Pipe, approved September 1, 2016.  403  404  ASTM C 443-12, Standard Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets, approved September 1, 2012.  407  408  ASTM D 1784-11, Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (PVC) Compounds, approved May 1, 2011.  411  412  ASTM D 1785-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120, approved August 1, 2015.  415  ASTM D 2241-09, Standard Specification for Poly(Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series), approved December 1, 2009.  418  December 1, 2009.  420  ASTM D 2464-15, Standard Specification for Threaded Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  421  ASTM D 2466-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, approved March 1, 2015.  425  ASTM D 2467-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  426  ASTM D 2467-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  431  432  ASTM D 2564-12, Standard Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved August 1, 2012.	395			
Culvert, Storm Drain, and Sewer Pipe, approved November 1, 2016.  401  ASTM C 361-16, Standard Specification for Reinforced Concrete Low-Head Pressure Pipe, approved September 1, 2016.  402  ASTM C 443-12, Standard Specification for Joints for Concrete 403  404  ASTM C 443-12, Standard Specification for Joints for Concrete 405  Pipe and Manholes, Using Rubber Gaskets, approved September 1, 2012.  408  ASTM D 1784-11, Standard Specification for Rigid Poly(Vinyl 409  Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl 410  Chloride) (PVC) Compounds, approved May 1, 2011.  411  ASTM D 1785-15, Standard Specification for Poly(Vinyl 413  Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120, approved 414  August 1, 2015.  415  ASTM D 2241-09, Standard Specification for Poly(Vinyl 416  Chloride) (PVC) Pressure-Rated Pipe (SDR Series), approved 418  December 1, 2009.  ASTM D 2464-15, Standard Specification for Threaded 421  Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved 422  ASTM D 2466-15, Standard Specification for Poly(Vinyl 425  Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, approved 426  March 1, 2015.  ASTM D 2467-15, Standard Specification for Poly(Vinyl 429  Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved 430  March 1, 2015.  431  ASTM D 2564-12, Standard Specification for Solvent Cements for 433  Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved 4344  ASTM D 2564-12, Standard Specification for Solvent Cements for 434	396			
Culvert, Storm Drain, and Sewer Pipe, approved November 1, 2016.  401  ASTM C 361-16, Standard Specification for Reinforced Concrete Low-Head Pressure Pipe, approved September 1, 2016.  402  ASTM C 443-12, Standard Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets, approved September 1, 2012.  405  406  407  ASTM D 1784-11, Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (PCPC) Compounds and Chlorinated Poly(Vinyl Chloride) (PCPC) Compounds, approved May 1, 2011.  411  412  ASTM D 1785-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120, approved August 1, 2015.  415  416  ASTM D 2241-09, Standard Specification for Poly(Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series), approved Poly(Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series), approved December 1, 2009.  419  ASTM D 2464-15, Standard Specification for Threaded Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  421  ASTM D 2466-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, approved March 1, 2015.  422  423  ASTM D 2467-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  428  ASTM D 2467-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  431  432  ASTM D 2564-12, Standard Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved August 1, 2012.	397	ASTM C 76-16, Standard Specification for Reinforced Concrete		
399 2016. 400 401 ASTM C 361-16, Standard Specification for Reinforced Concrete 402 Low-Head Pressure Pipe, approved September 1, 2016. 403 404 ASTM C 443-12, Standard Specification for Joints for Concrete 405 Pipe and Manholes, Using Rubber Gaskets, approved September 1, 406 407 408 ASTM D 1784-11, Standard Specification for Rigid Poly(Vinyl 409 Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl 410 Chloride) (CPVC) Compounds, approved May 1, 2011. 411 412 ASTM D 1785-15, Standard Specification for Poly(Vinyl 413 Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120, approved 414 August 1, 2015. 415 416 ASTM D 2241-09, Standard Specification for Poly(Vinyl 417 Chloride) (PVC) Pressure-Rated Pipe (SDR Series), approved 418 December 1, 2009. 420 ASTM D 2464-15, Standard Specification for Threaded 421 Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, 422 approved March 1, 2015. 423 424 ASTM D 2466-15, Standard Specification for Poly(Vinyl 425 Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, approved 426 March 1, 2015. 427 428 ASTM D 2467-15, Standard Specification for Poly(Vinyl 429 Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved 430 March 1, 2015. 431 432 ASTM D 2564-12, Standard Specification for Solvent Cements for 433 Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved 434	398	<u>-</u>		
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ASTM C 443-12, Standard Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets, approved September 1, 2012.  ASTM D 1784-11, Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds, approved May 1, 2011.  ASTM D 1785-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120, approved August 1, 2015.  ASTM D 2241-09, Standard Specification for Poly(Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series), approved ASTM D 2241-09, Standard Specification for Threaded Poly(Chloride) (PVC) Pressure-Rated Pipe (SDR Series), approved ASTM D 2464-15, Standard Specification for Threaded Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  ASTM D 2466-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, approved March 1, 2015.  ASTM D 2467-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  ASTM D 2467-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  ASTM D 2564-12, Standard Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved August 1, 2015.		<u> </u>		
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405 Pipe and Manholes, Using Rubber Gaskets, approved September 1, 406 407 408 ASTM D 1784-11, Standard Specification for Rigid Poly(Vinyl 409 409 Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl 410 410 Chloride) (CPVC) Compounds, approved May 1, 2011. 411 412 ASTM D 1785-15, Standard Specification for Poly(Vinyl 413 414 Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120, approved 414 415 ASTM D 2241-09, Standard Specification for Poly(Vinyl 415 416 ASTM D 2241-09, Standard Specification for Poly(Vinyl 417 418 Chloride) (PVC) Pressure-Rated Pipe (SDR Series), approved 418 419 420 ASTM D 2464-15, Standard Specification for Threaded 421 421 Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, 422 422 approved March 1, 2015. 423 424 ASTM D 2466-15, Standard Specification for Poly(Vinyl 425 426 Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, approved 426 427 428 ASTM D 2467-15, Standard Specification for Poly(Vinyl 429 430 Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved 430 431 432 ASTM D 2564-12, Standard Specification for Solvent Cements for 433 434 Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved 434 435 436 ASTM D 2564-12, Standard Specification for Solvent Cements for 433 439 Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved 434		ASTM C 443-12. Standard Specification for Joints for Concrete		
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ASTM D 2241-09, Standard Specification for Poly(Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series), approved December 1, 2009.  ASTM D 2464-15, Standard Specification for Threaded Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  ASTM D 2466-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, approved March 1, 2015.  ASTM D 2466-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, approved March 1, 2015.  ASTM D 2467-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  ASTM D 2564-12, Standard Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved August 1, 2012.		1108000 1, 2010.		
417 Chloride) (PVC) Pressure-Rated Pipe (SDR Series), approved 418 December 1, 2009. 419 420 ASTM D 2464-15, Standard Specification for Threaded 421 Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, 422 approved March 1, 2015. 423 424 ASTM D 2466-15, Standard Specification for Poly(Vinyl 425 Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, approved 426 March 1, 2015. 427 428 ASTM D 2467-15, Standard Specification for Poly(Vinyl 429 Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved 430 March 1, 2015. 431 432 ASTM D 2564-12, Standard Specification for Solvent Cements for 433 Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved 434 August 1, 2012.		ASTM D 2241-09. Standard Specification for Poly(Vinyl		
418 420 ASTM D 2464-15, Standard Specification for Threaded 421 Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, 422 approved March 1, 2015.  423 424 ASTM D 2466-15, Standard Specification for Poly(Vinyl 425 Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, approved 426 March 1, 2015.  427 428 ASTM D 2467-15, Standard Specification for Poly(Vinyl 429 Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved 430 March 1, 2015.  431 432 ASTM D 2564-12, Standard Specification for Solvent Cements for 433 Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved 434 August 1, 2012.				
420 ASTM D 2464-15, Standard Specification for Threaded 421 Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, 422 approved March 1, 2015. 423 424 ASTM D 2466-15, Standard Specification for Poly(Vinyl 425 Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, approved 426 March 1, 2015. 427 428 ASTM D 2467-15, Standard Specification for Poly(Vinyl 429 Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved 430 March 1, 2015. 431 432 ASTM D 2564-12, Standard Specification for Solvent Cements for 433 Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved 434 August 1, 2012.		7		
ASTM D 2464-15, Standard Specification for Threaded Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  ASTM D 2466-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, approved March 1, 2015.  ASTM D 2467-15, Standard Specification for Poly(Vinyl ASTM D 2467-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  ASTM D 2564-12, Standard Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved August 1, 2012.		200011001 1, 20071		
421 Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, 422 approved March 1, 2015. 423 424 ASTM D 2466-15, Standard Specification for Poly(Vinyl 425 Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, approved 426 March 1, 2015. 427 428 ASTM D 2467-15, Standard Specification for Poly(Vinyl 429 Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved 430 March 1, 2015. 431 432 ASTM D 2564-12, Standard Specification for Solvent Cements for 433 Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved 434 August 1, 2012.		ASTM D 2464-15. Standard Specification for Threaded		
approved March 1, 2015.  ASTM D 2466-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, approved March 1, 2015.  ASTM D 2467-15, Standard Specification for Poly(Vinyl ASTM D 2467-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  ASTM D 2564-12, Standard Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved August 1, 2012.		<u> </u>		
423 424 ASTM D 2466-15, Standard Specification for Poly(Vinyl 425 Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, approved 426 March 1, 2015. 427 428 ASTM D 2467-15, Standard Specification for Poly(Vinyl 429 Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved 430 March 1, 2015. 431 432 ASTM D 2564-12, Standard Specification for Solvent Cements for 433 Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved 434 August 1, 2012.				
ASTM D 2466-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, approved March 1, 2015.  ASTM D 2467-15, Standard Specification for Poly(Vinyl ASTM D 2467-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  ASTM D 2564-12, Standard Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved August 1, 2012.		approved March 1, 2010.		
Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, approved March 1, 2015.  ASTM D 2467-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  ASTM D 2564-12, Standard Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved August 1, 2012.		ASTM D 2466-15. Standard Specification for Poly(Vinyl		
March 1, 2015.  ASTM D 2467-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  ASTM D 2564-12, Standard Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved August 1, 2012.		<u> </u>		
427 428 ASTM D 2467-15, Standard Specification for Poly(Vinyl 429 Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved 430 March 1, 2015. 431 432 ASTM D 2564-12, Standard Specification for Solvent Cements for 433 Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved 434 August 1, 2012.				
ASTM D 2467-15, Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  ASTM D 2564-12, Standard Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved August 1, 2012.		1,141011 1, 2013.		
Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.  ASTM D 2564-12, Standard Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved August 1, 2012.		ASTM D 2467-15 Standard Specification for Poly(Vinyl		
430 431 432 ASTM D 2564-12, Standard Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved August 1, 2012.				
431 432 ASTM D 2564-12, Standard Specification for Solvent Cements for 433 Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved 434 August 1, 2012.		1 0		
ASTM D 2564-12, Standard Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved August 1, 2012.		11111011 1, 2010.		
433 Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved August 1, 2012.		ASTM D 2564-12. Standard Specification for Solvent Cements for		
434 August 1, 2012.		· • • • • • • • • • • • • • • • • • • •		
$\mathcal{E}$				
	435	1145400 1, 2012.		

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436	ASTM D 3139-11, Standard Specification for Joints for Plastic
437	Pressure Pipes Using Flexible Elastomeric Seals, February 1, 2011
438	
439	ASTM F 437-15, Standard Specification for Threaded Chlorinated
440	Poly(Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80,
441	approved March 1, 2015.
442	
443	ASTM F 438-15, Standard Specification for Socket-Type
444	Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe Fittings,
445	Schedule 40, approved March 1, 2015.
446	
447	ASTM F 439-13, Standard Specification for Chlorinated Poly
448	(Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80,
449	approved August 1, 2013.
450	
451	ASTM F 441/F 441M-15, Standard Specification for Chlorinated
452	Poly(Vinyl Chloride) (CPVC) Plastic Pipe, Schedules 40 and 80,
453	approved August 1, 2015.
454	
455	ASTM F 442/F 442M-13, Standard Specification for Chlorinated
456	Poly(Vinyl Chloride) (CPVC) Plastic Pipe (SDR–PR), approved
457	June 1, 2013.
458	
459	ASTM F 477-14, Standard Specification for Elastomeric Seals
460	(Gaskets) for Joining Plastic Pipe, approved September 15, 2014.
461	
462	ASTM F 493-14, Standard Specification for Solvent Cements for
463	Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe and
464	Fittings, approved November 1, 2014.
465	
466	ASTM F 1216-16, Standard Practice for Rehabilitation of Existing
467	Pipelines and Conduits by the Inversion and Curing of a Resin-
468	Impregnated Tube, approved August 1, 2016.
469	
470	AWWA. American Water Works Association et al., 6666 West
471	Quincy Ave., Denver CO 80235, (303)794-7711.
472	
473	AWWA A100-06, Water Wells, approved February 2, 2006,
474	effective August 1, 2006.
475	
476	AWWA B100-09, Granular Filter Material, approved January 25,
477	2009, effective March 1, 2010.
478	

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479 480	AWWA C151/A21.51-09, Ductile-Iron Pipe, Centrifugally Cast, approved January 25, 2009, effective September 1, 2009.
481 482	AWWA C200-12, Steel Water Pipe, 6 In. (150 mm) and Larger,
483 484	approved June 10, 2012, effective September 1, 2012.
485 486	AWWA C301-07, Prestressed Concrete Pressure Pipe, Steel-Cylinder Type, approved January 21, 2007, effective June 1, 2007.
487 488	AWWA C651-05, Disinfecting Water Mains, approved January
489 490	16, 2005, effective June 1, 2005.
491 492	AWWA C652-11, Disinfection of Water Storage Facilities, approved June 12, 2011, effective October 1, 2011.
493 494 495	AWWA C653-03, Disinfection of Water Treatment Plants, approved January 19, 2003, effective June 1, 2003.
496 497	AWWA C654-03, Disinfection of Wells, approved January 19,
498 499	2003, effective November 1, 2003.
500 501 502	AWWA C900-07 Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 In. Through 12 In. (100 mm Through 300 mm), for Water Transmission and Distribution, 2007.
503 504	AWWA C905-10, Polyvinyl Chloride (PVC) Pressure Pipe and
505 506	Fabricated Fittings, 14 In. Through 48 In. (350 mm Through 1,200 mm), approved January 17, 2010, effective April 1, 2010.
507 508	AWWA C906-07 Polyethylene (PE) Pressure Pipe and Fittings, 4
509 510	In. (100 mm) Through 63 In. (1,600 mm) for Water Distribution and Transmission, 2007.
511 512	AWWA C907-12 Injection-Molded Polyvinyl Chloride (PVC)
513 514	Pressure Fittings, 4 In. Through 12 In. (100 mm Through 300 mm), for Water, Wastewater, and Reclaimed Water Service,
515 516	effective March 1, 2012.
517 518	AWWA C909-09 Molecularly Oriented Polyvinyl Chloride (PVCO) Pressure Pipe, 4 In. through 24 In. (100 mm through 600
519 520	mm) for Water, Wastewater, and Reclaimed Water Service, effective March 1, 2010.
521	

522	AWWA D100-11, Welded Carbon Steel Tanks for Storage,
523	approved January 23, 2011, effective July 1, 2011.
524 525	ANNUA D102 00 E
525 526	AWWA D103-09, Factory Coated Bolted Carbon Steel Tanks for
526 527	Water Storage, approved January 25, 2009, effective November 1,
527	2009.
528	AWWA D107 10 Commonity Florested Tombre for Wester Stores
529 520	AWWA D107-10, Composite Elevated Tanks for Water Storage,
530 531	approved January 17, 2010, effective December 1, 2010.
532	"Improving Clearwell Design for CT Compliance" (1999).
533	improving clear went Design for C1 Compitance (1999).
534	"The Water Dictionary", 2 <sup>nd</sup> Edition, 2010.
535	The water Dictionary, 2 Edition, 2010.
536	The Chlorine Institute, 1300 Wilson Boulevard, Suite 525, Arlington VA
537	22209, (703)894-4140, pubs@CL2.com.
538	2220), (703)0) 1 11 10, pubs e C12.com.
539	Pamphlet 6: Piping Systems for Dry Chlorine, Edition 16, March
540	2013.
541	2013.
542	NSF. National Sanitation Foundation International, 789 N. Dixboro
543	Road3475 Plymouth Road, PO Box 130140, Ann Arbor MI 4810548113
544	<del>0140</del> , (734)769-8010.
545	
546	NSF/ANSI 14-2012 Plastics Piping System Components and
547	Related Materials, March 2013.
548	
549	NSFNFS/ANSI 60-201460-2013 Drinking Water Treatment
550	Chemicals – Health Effects, April 2014.
551	•
552	NSF/ANSI 61-201461-2013 Drinking Water System Components
553	- Health Effects, March 2014.
554	
555	NSF/ANSI 372-2011 Drinking Water System Components – Lead
556	Content, July 2013.
557	
558	"Recommended Standards for Water Works – Policies for the Review and
559	Approval of Plans and Specifications for Public Water Supplies", 2012
560	Edition, Great Lakes – Upper Mississippi River Board of State and
561	Provincial Public Health and Environmental Managers, Health Research
562	Inc., Health Education Services Division, <u>821 Corning Tower</u> PO Box
563	<del>7126</del> , Albany NY <u>12237</u> <del>12224</del> , (518) <u>431-1200</u> <del>439-7286</del> .
564	

565 566 567 568	Illinois", 7 <sup>th</sup> Edition, 20	s for Water and Sewer Main Construction in 14, Illinois Society of Professional Engineers, 100 Springfield IL 62701, (217)544-7424.	
569 570 571 572	National Service Center	d States Environmental Protection Agency, for Environmental Publications, P.O. Box 42419, 419 (accessible online on line and available by ww.epa.gov/nscep/).	
573 574 575 576	August 1999, EI	filing and Benchmarking Guidance Manual, PA 815-R-99-013.	
577 578 579 580	Recommendatio	on Control Treatment Evaluation Technical ns for Primacy Agencies and Public Water 2016, EPA 816-B-16-003.	
581 582 583	incorporated.	ions of the materials listed in subsection (b) are	
584 585	(Source: Amended at 47 Ill. Reg		
586 587	Section 601.APPENDIX A References to Fo	ormer Rules (Repealed)	
588 589 590	The following table is provided to aid in referencing former Board rule numbers to section numbers pursuant to codification.		
	Chapter 6: Public Water Supplies	35 Ill. Adm. Code	
	Part I: Introduction	Part 601	
	Rule 101	Section 601.101	
	Rule 102	<del>Deleted</del>	
	Rule 103	<del>Deleted</del>	
	Rule 104	Section 601.105	
	Rule 105	Section 601.104	
	Rule 106	Section 601.102	
	Rule 107	Section 601.103	
591			
592	(Source: Repealed at 47 Ill. Reg		